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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,418	02/05/2002	Joel R. Goergen	3981-35	9574

7590 01/12/2005  
James E. Harris  
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Portland, OR 97205

EXAMINER

VO, TIM T

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/068,418

Applicant(s)

GOERGEN, JOEL R.

Examiner

Tim T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

This application has been examined. Claims 1-20 are pending.

#### ***Response to Arguments***

1. Applicant's arguments, see pages 6-7 of Remarks, filed 10/12/2004, with respect to the rejection(s) of claim(s) 1-2 under 35 U.S.C. § 102(e) as being anticipated by Langley, Sr et al. patent number 6,751,699 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made under 35 U.S.C. § 103(a) as being unpatentable over Francis et al. patent number 6,580,720 in view of Zheng et al. patent number 6,804,255.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Francis et al. patent number 6,580,720 in view of Zheng et al. patent number 6,804,255 referred hereinafter "Francis and Zheng".

As for claim 1, Francis teaches a modular router comprising a single electrical back plane rated to distribute at least 5000 Watts of power from a power supply to modules connected to the back plane (see figure 15A, Hub Rack 2 and column 27 lines

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1-27, wherein Hub Rack 2 is interpreted as a single back plane receiving power from AC power 214 (column 24 lines 43-44), the Hub Rack distributed output power to plurality of PI racks 1 that is connecting to the Hub rack 2 as discloses in figure 15A. Further each PI rack 1 consumed at least 1250 Watts (column 22 lines 20-24). Further, Figure 15A discloses 8 PI rack 1 is electrically connecting to the Hub Rack 2 via the Electrical line and therefore, 8 times 1250 Watts is greater than 5000 Watts). The back plane further comprising multiple high speed serial differential signaling trace pairs for carrying packet data signaling between modules connected to the back plane (see figures 15A, Fiber optic cables are connecting to the Hub rack 2 for data transferring). Francis does not expressly teach the fiber optic cables capable transferring at least 500 Gigabits/second. However, it is known that the Wide bandwidth: Optical fiber has been proven to have the widest bandwidth compared to any other media known, including wireless, copper wire, sonar, and even free-space-optics. Tera Hertz (10 to the 12th power) bit rate as Zheng mentioned in column 2 lines 28-39). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Zheng into the teachings of Francis because Zheng increases transmission performance by providing a faster transmission rate in terabit per second.

As for claim 2, Langley teaches the back plane is also rated to simultaneously distribute at least 5000 Watts of power (see figure 15A, Hub Rack 2 and column 27 lines 1-27, wherein Hub Rack 2 is interpreted as a single back plane receiving power from AC power 214 (column 24 lines 43-44), the Hub Rack distributed output power to

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plurality of PI racks 1 that is connecting to the Hub rack 2 as discloses in figure 15A.

Further each PI rack 1 consumed at least 1250 Watts (column 22 lines 20-24). Further,

Figure 15A discloses 8 PI rack 1 is electrically connecting to the Hub Rack 2 via the Electrical line and therefore, 8 times 1250 Watts is greater than 5000 Watts).

### ***Allowable Subject Matter***

3. Claims 8-20 are allowable over the prior of records.

4. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Examiner's Statement of Reasons for Allowance***

5. The following is an Examiner's statement of reasons for the indication of allowable subject matter: Claims 8 and 20 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior arts. Prior art fails to teach at least two power planes embedded between the high speed signaling layers and isolated from the high speed signaling layers by ground planes, the power planes connected to the second back plane electrical connector sets the first and second card pluralities.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The remaining claims, not specifically mentioned, is allowed for the same reason above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



1/6/2004

Tim T. Vo  
Primary Examiner  
Art Unit 2112